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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,646	07/09/2001	Klaus Ulrich	VI/98-023.DE	7684

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EXAMINER

WILLIAMS, CATHERINE SERKE

ART UNIT	PAPER NUMBER
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3763

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DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/763,646

Applicant(s)

URICH, KLAUS

Examiner

Catherine S. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 4-7, 14, 16, 34, 37, 46, 49-59, 91-99, 101-103 and 132-137 is/are allowed. *See 59-101*
- 6) ☒ Claim(s) 17-25, 27, 32, 33, 62-70, 72, 77-84, 86, 104-107, 139, 140, 142 and 143 is/are rejected. *See 140*
- 7) ☒ Claim(s) 28-31, 73-76, 87-90, 109-111 and 113-131 is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No.         .
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date         .
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date         .
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:         .

Continuation of Disposition of Claims: Claims pending in the application are 1,4-7,13,14,16-25,27-34,37,46,49-55,59,60,62-70,72-84,86-99,101-107,109-111,113-137,139,140,142 and 143.

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-25, 27, 32-33, 62-70, 72, 77-84, 86, 104-107, 139-140, 142, 143 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kranys et al (US Pat# 4,006,736) et al in view of Bernstein et al (US pat# 5,611,344). Kranys discloses an angiographic injector that includes an injector, a syringe a plunger and a movement mechanism (28). The injector and syringe have means cooperable for mounting. The movement mechanism is connected to the syringe. The movement mechanism is operable to move the syringe in a semi-circular (rotational) path. The fluid within the syringe is an ultrasound contrast agent. When the syringes are rotated it is considered inherent that any fluid contained therein will be agitated during the movement. The method steps are considered inherent for proper function of the device. For example, since a syringe, injector and movement mechanism are all disclosed it is inherent that they all must be provided. During use, once the syringes are rotated the claim language of "activating the movement mechanism" will be met. Once the syringes have complete a ½ turn it is inherent that the step of "deactivating the movement mechanism" has been met. See figures 2 and 3.

Kranys meets the claim limitations as described above but fails to include an agitation element that (i) has a density different from that of the fluid contained in the syringe, (ii) is a

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solid, (iii) is a gas and (iv) is surrounded by a cover. However, Bernstein discloses a microencapsulated fluorinated gas for use as an imaging agent. See summary of invention.

At the time of the invention, it would have been obvious to incorporate the imaging agent of Bernstein into the invention of Kranys. Bernstein discloses that this imaging agent has enhanced echogenicity compared with other agents. The motivation for the incorporation would have been in order to enhance the overall procedure of Kranys by using a known enhanced agent.

***Allowable Subject Matter***

Claims 1,4-7,14,16,34,37,46,49-~~50~~<sup>55, 59-60</sup>,91-99,101-103,132-137 are allowed. <sup>Ben.</sup>

Claims 28-31,73-76,87-90,109-111,113-131 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine S. Williams whose telephone number is 703-308-4846. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Catherine S. Williams *CSW*  
May 17, 2004

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700